

NAME

stmf – SCSI Target Mode Framework Command Line Interface

SYNOPSIS

```
stmfadm add-hg-member <-g, --group-name group name> group member ...
stmfadm add-hg-member <-g, --group-name group name> group member ...
stmfadm add-view [-n, --lun<logical_unit_number> t(--target-group) <group_name>
    h(--host-group) <group_name>] lu name
stmfadm create-hg group name
stmfadm create-tg group name
stmfadm delete-tg group name
stmfadm delete-hg group name
stmfadm list-hg [-v] [group name ...]
stmfadm list-tg [-v] [group name ...]
stmfadm list-lu [-v] [lu name ...]
stmfadm list-target [-v] [target name ...]
stmfadm list-view lu name [entry index ...]
stmfadm remove-hg-member <-g, --group-name group name> group member ...
stmfadm remove-tg-member <-g, --group-name group name> group member ...
stmfadm remove-view <-l, --lu-name) lu name> entry name ...
```

The stmf command configures logical units within the stmf framework as described by stmf(7D).

initiator

A device responsible for issuing SCSI I/O commands to a SCSI target and logical unit.

target

A device responsible for receiving SCSI I/O commands for a logical unit.

logical unit

A device within a target responsible for executing SCSI I/O commands.

logical unit number

The identifier of a logical unit within a target.

initiator group

An initiator group is a set of one or more initiators that are combined together for the purposes of being applied to a view (see views below). Initiators cannot be a member of more than one initiator group.

target group

A target group is a set of one or more SCSI target ports that are combined together for the purposes of being applied to a view (see views below). target ports cannot be a member of more than one target group.

view

A view defines the association of an initiator group, a target group and a logical unit number with a specified logical unit. Any view entry added to a logical unit must not be in conflict with existing view entries for that logical unit. A view entry is considered to be in conflict when an attempt is made to duplicate the association of any given initiator, target and logical unit number. As an example, logical unit LU_0 has the following view entry associated with it:

```
Logical Unit: LU_5
  View Entry: VE_0
    initiator group: HostA
    target group: All targets
    logical unit number: 32
```

If a user attempted to apply the following:

```
stmf add-view -l 31 -i HostA LU_5
```

the operation would return an error with a message indicating that the view entry is in conflict with one or more existing view entries. This conflict arises because the existing view entry, VE_0, already has mapped LU_0 to logical unit number 32 for the initiator group HostA.

SUBCOMMANDS

stmfadm ?

stmfadm add-view

Adds a logical unit view entry to a logical unit lu_name where lu_name is the stmf name for the logical unit as displayed by the list-lu subcommand. The add-view subcommand provides the user with a mechanism to implement access control for a logical unit and also provides a means of assigning a logical unit number to a logical unit for a given set of initiators and targets. A logical unit will not be available to any initiators until at least one view is applied. Each view entry gets assigned an entry name which can be used to reference the entry in the remove-view and list-view subcommands.

```
-l, --lun <logical_unit_number>
```

logical_unit_number is an integer in the range 0-16383 to be assigned to the logical unit for this view entry. If this option is not specified, a logical unit number will be assigned by the stmf framework.

-t, --target-group <group_name>

group_name is the name of a target group previously created using the stmf create-tg subcommand. If this option is not specified, the logical unit will be available through all targets.

-h, --host-group <group_name>

group_name is the name of an host group previously created using the stmf create-hg subcommand. If the -h, --host-group option is not specified, the logical unit will be available to all initiators that login to the stmf framework.

stmfadm add-hg-member <-g group name> group member

Add a host group member to a host group. group_name must be an existing group created using the create-hg subcommand. group_member must be specified as <name_type>:<name_value> where <name_type> can be one of the following:

wwn
iscsi

and <name_value> is the value of the initiator name. As an example, to add a fibre channel initiator port world-wide name 200000e08b909221 to the host group “HostA”, the command would be:

```
stmf add-hg-member HostA wwn:200000e08b909221
```

An initiator cannot be a member of more than one host group.

stmfadm add-tg-member <-g group name> group member

Add a target group member to a target group. group_name must be an existing group created using the create-hg subcommand. group_member must be specified as <name_type>:<name_value> where <name_type> can be one of the following:

wwn
iscsi

and <name_value> is the value of the target name. As an example, to add an iSCSI target name iqn.1986-03.com.sun:01:e0.46b7700a to the target group “Array0”, the command would be:

```
stmf add-hg-member Array0 iscsi:iqn.1986-03.com.sun:01:e0.46b7700a
```

A target cannot be a member of more than one target group.

stmfadm create-hg group name

Create an initiator group with the name group name. group name is a string of ascii printable characters with a maximum length of 255. The group name must be unique within the stmf system.

stmfadm create-tg group name

Create a target group with the name group name. group name is a string of ascii printable characters with a maximum length of 255. The group name must be unique within the stmf system.

stmfadm delete-hg group name

Delete an host or target group that is no longer needed.

stmfadm delete-tg group name

Delete an host or target group that is no longer needed.

stmfadm list-hg

Lists information for the host group in the system referenced by host group name. If host group name is not specified, all host groups in the system will be listed.

stmfadm list-target

Lists information for the target port in the system referenced by target name. If target name is not specified, all target ports in the system will be listed.

stmfadm list-tg

Lists information for the target group in the system referenced by target group name. If target group name is not specified, all target groups in the system will be listed.

stmfadm list-lu lu name

Lists information for the logical unit in the system referenced by lu name. If lu name is not specified, all logical units in the system will be listed.

stmfadm list-view

Lists information for the the view entry for a logical unit referenced by entry name. If entry name is not specified, all view entries for the specified logical unit will be listed.

stmfadm remove-hg-member <-g group name> group member

Removes a host group member from a host group. group_name must be an existing group created using the create-hg subcommand. group_member must be specified as <name_type>:<name_value> where <name_type> can be one of the following:

wwn
iscsi

and <name_value> is the value of the initiator name. As an example, to remove a fibre channel initiator port world-wide name 200000e08b909221 from the host group “HostA”, the command would be:

```
stmf remove-hg-member HostA wwn:200000e08b909221
```

stmfadm remove-tg-member <-g group name> group member

Removes a target group member from a target group. group_name must be an existing group created using the create-hg subcommand. group_member must be specified as <name_type>:<name_value> where <name_type> can be one of the following:

wwn
iscsi

and <name_value> is the value of the target name. As an example, to remove an iSCSI target name iqn.1986-03.com.sun:01:e0.46b7700a from the target group “Array0”, the command would be:

```
stmf remove-hg-member Array0 iscsi:iqn.1986-03.com.sun:01:e0.46b7700a
```

stmf remove-view

Removes a logical unit view entry from a logical unit.